



STATE OF MARYLAND

DMMH

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Public Health & Emergency Preparedness Bulletin: # 2010:08

Reporting for the week ending 02/27/10 (MMWR Week #08)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

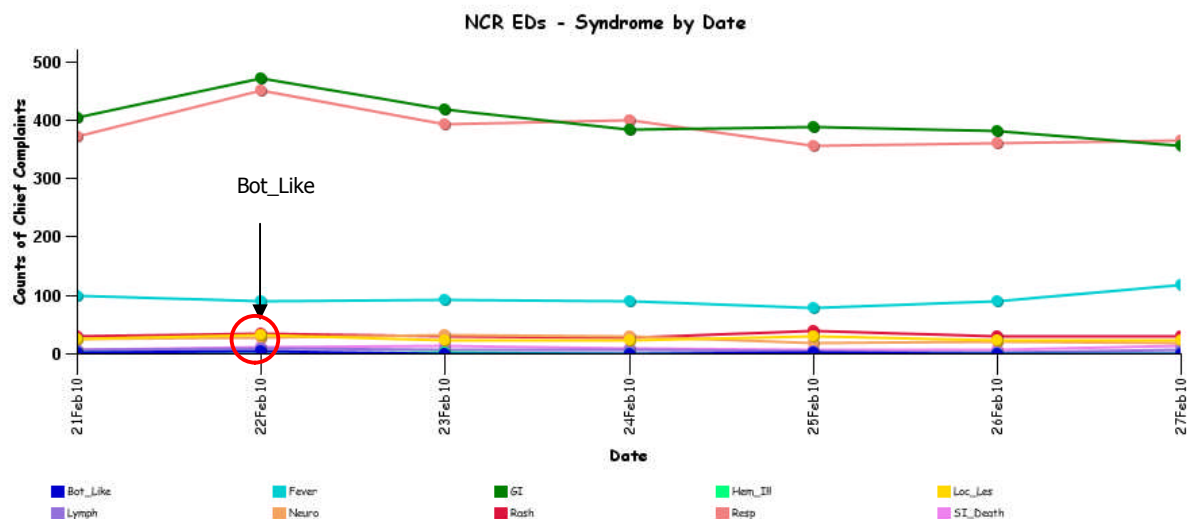
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled.

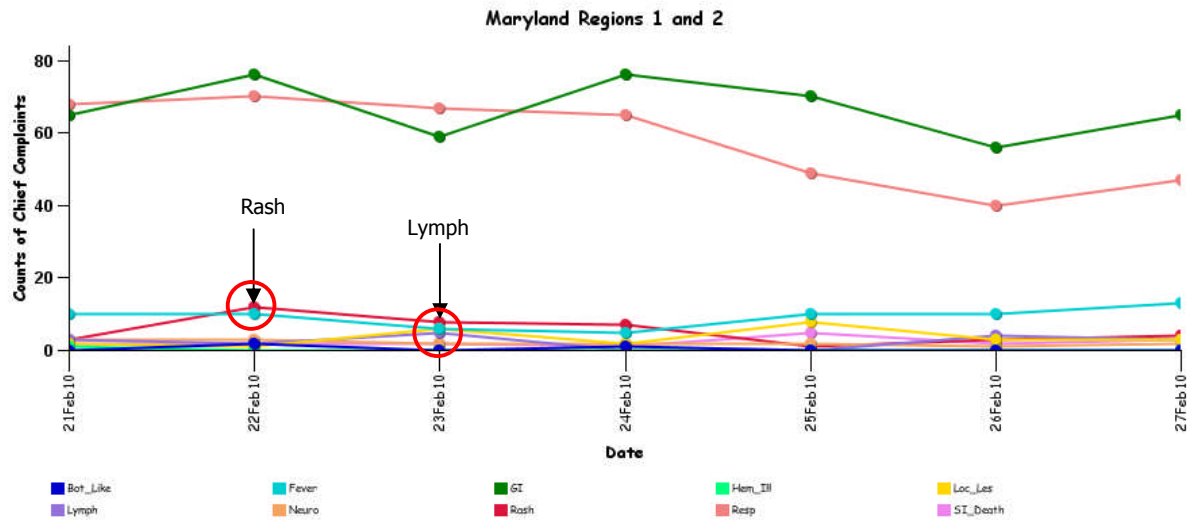
Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

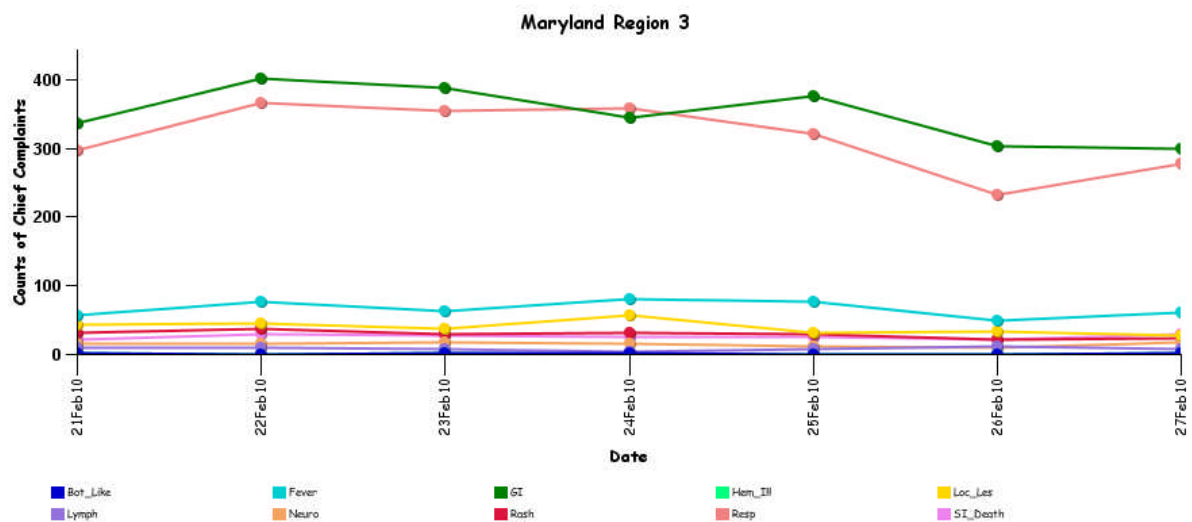


* Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

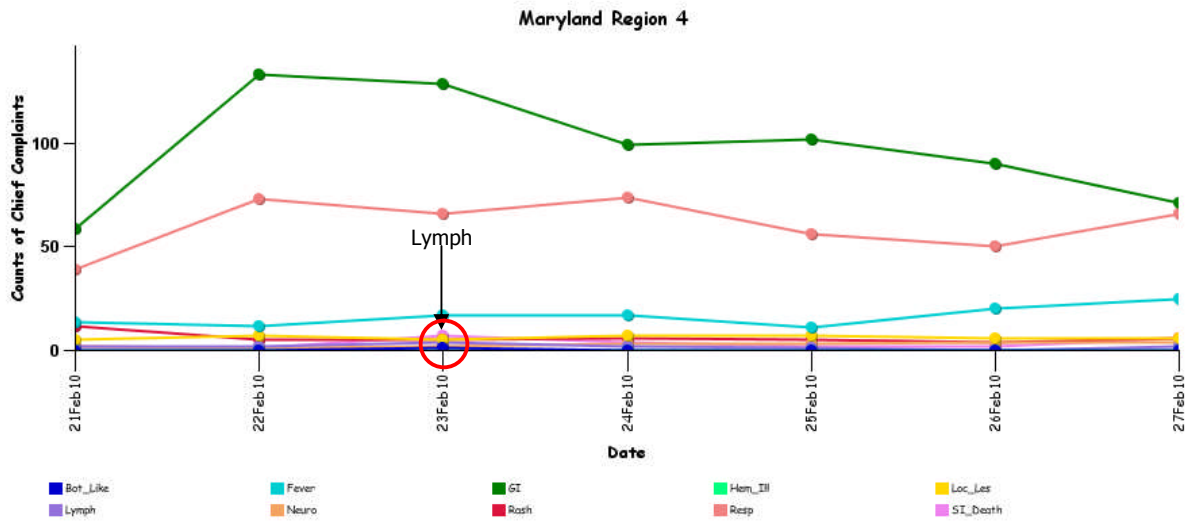
MARYLAND ESSENCE:



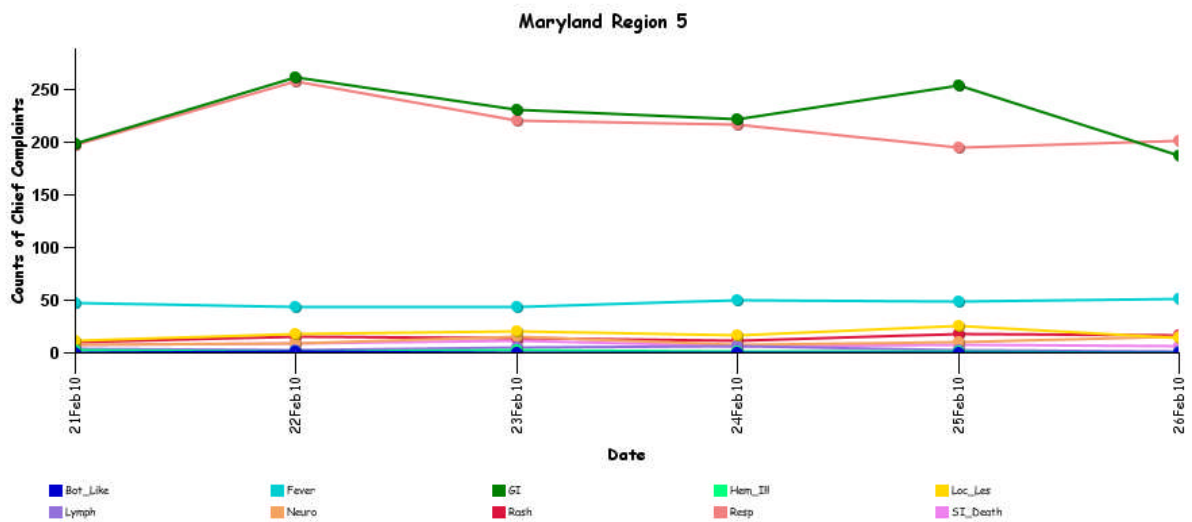
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore city, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



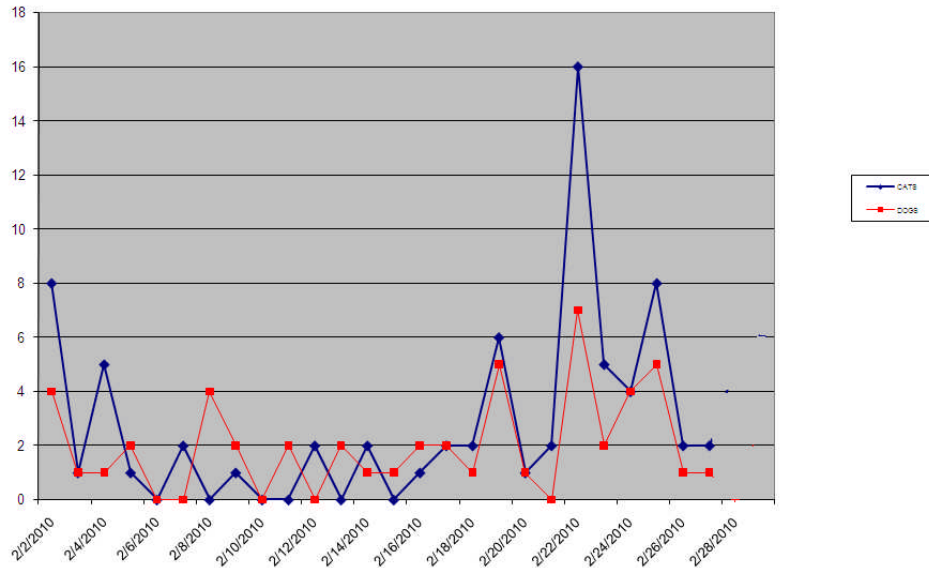
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

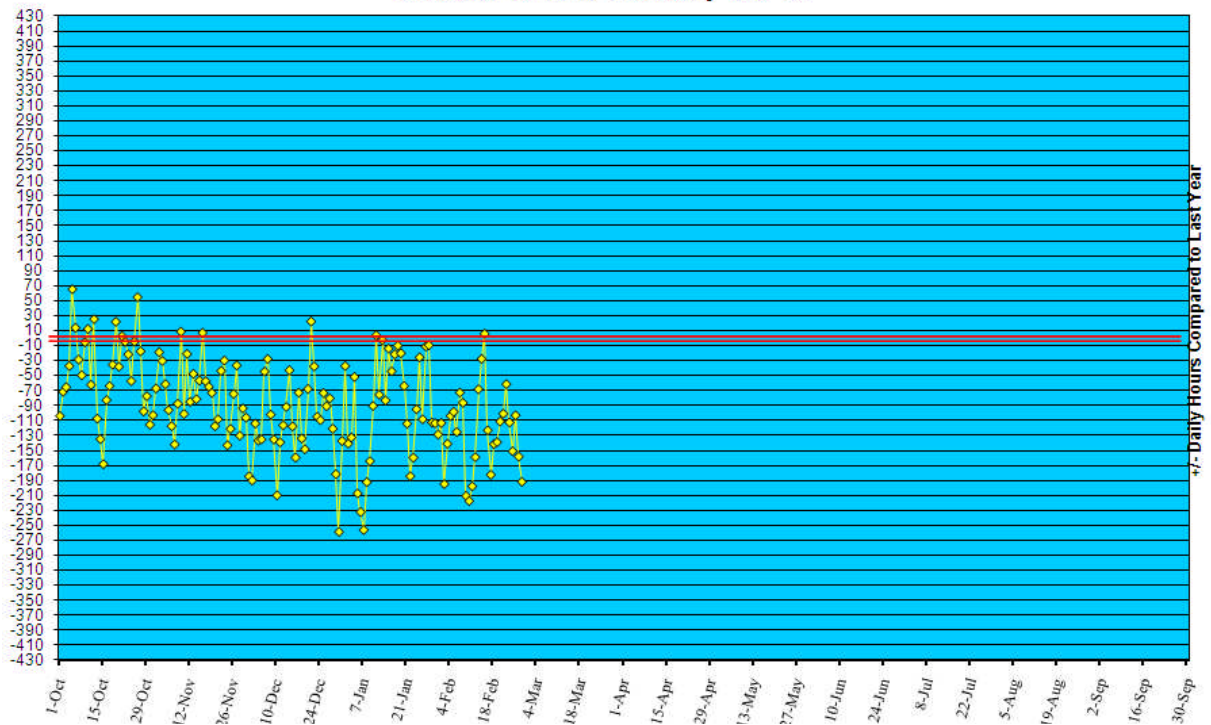
Dead Animal Pick-Up Calls to 311



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/09.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '09 to February 27, '10



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in January 2010 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (Feb 21- Feb 27, 2010):	03	0
Prior week (Feb 14- Feb 20, 2010):	18	0
Week#08, 2009 (Feb 22- Feb 28, 2009):	10	0

10 outbreaks were reported to DHMH during MMWR Week 8 (February 21-February 27, 2010)

8 Gastroenteritis outbreaks

3 outbreaks of GASTROENTERITIS in Nursing Homes
1 outbreak of GASTROENTERITIS in an Assisted Living Facility
2 outbreaks of GASTROENTERITIS in Hospitals
2 outbreaks of GASTROENTERITIS in Schools

2 Respiratory illness outbreaks

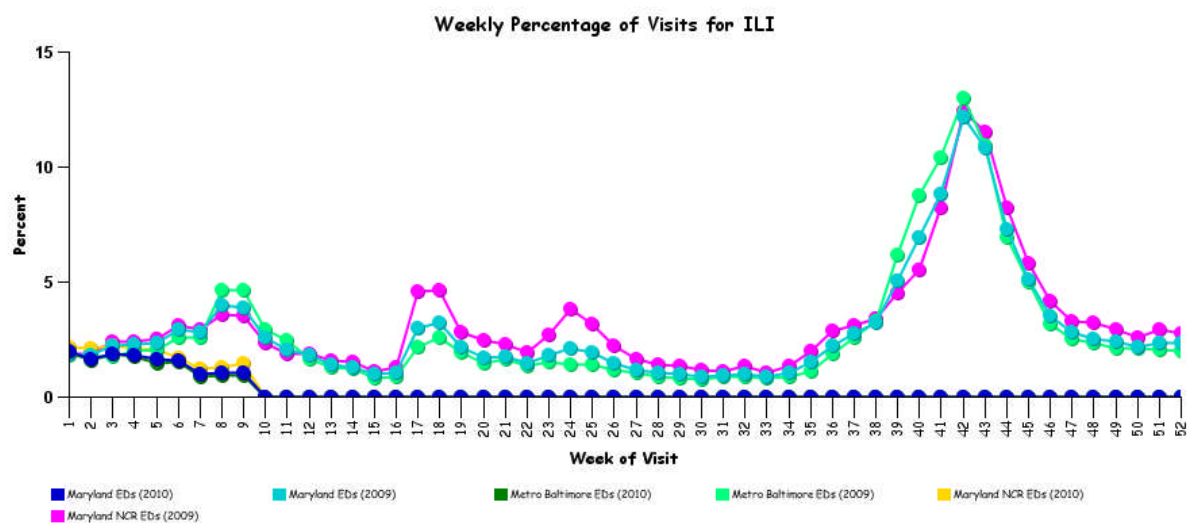
1 outbreak of ILI/PNEUMONIA in a Nursing Home
1 outbreak of RSV in a Hospital

MARYLAND INFLUENZA STATUS: Influenza activity in Maryland for Week 08 is SPORADIC.

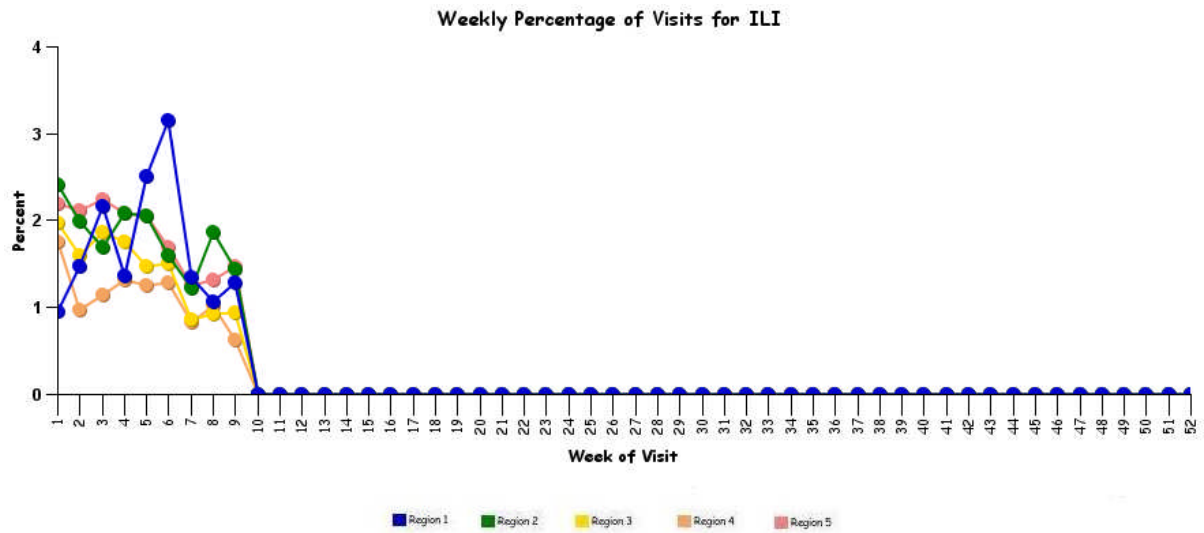
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



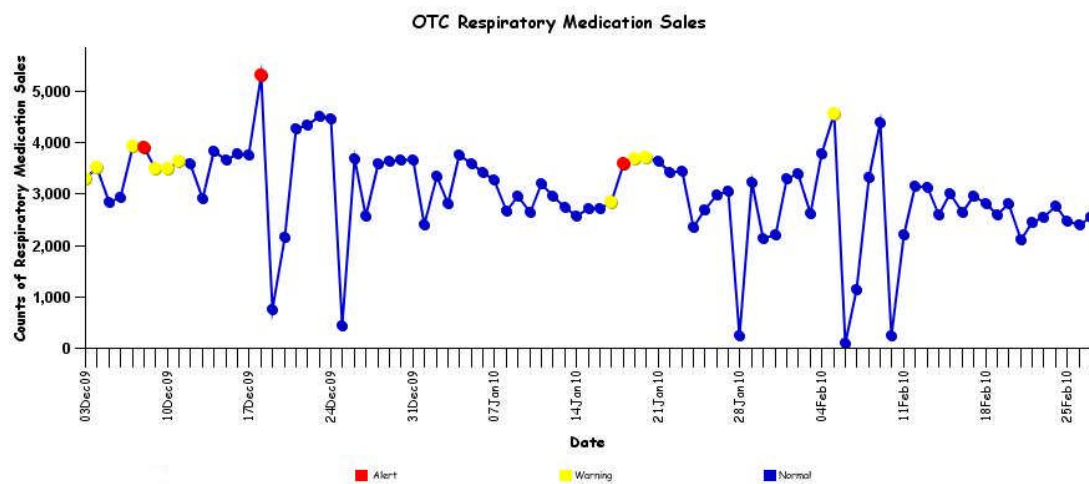
* Includes 2009 and 2010 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2010 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE:

WHO Pandemic Influenza Phase: Phase 6: Characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. Definition of Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

US Pandemic Influenza Stage: Stage 0: New domestic animal outbreak in at-risk country

****More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:**
[http://preparedness.dhmmh.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex\(Vers7.2\).pdf](http://preparedness.dhmmh.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex(Vers7.2).pdf)

AVIAN INFLUENZA-RELATED REPORTS:

WHO update: As of February 17, 2010, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 478, of which 286 have been fatal. Thus, the case fatality rate for human H5N1 is about 60%.

AVIAN INFLUENZA, Human (VIET NAM): 27 Feb 2010, A 38 year old woman has become the 1st victim [fatal case] of bird flu in Viet Nam in 2010, bringing the country's toll from avian influenza to 58, the health ministry said on Friday [26 Feb 2010]. The woman died on Tuesday [23 Feb 2010] in the southern province of Tien Giang after 2 days of unsuccessful hospital treatment, said the Ministry in an online statement. The victim had killed and cooked sick waterfowl, the statement added. Viet Nam's last death from the H5N1 virus was in December [2009]. At present, outbreaks of bird flu among poultry have been reported in 5 provinces. Viet Nam ranks 2nd after Indonesia for the highest bird flu death toll, according to the World Health Organization.

AVIAN INFLUENZA, HUMAN (EGYPT): 25 Feb 2010, A boy, age 10 years, began to exhibit symptoms on 10 Feb 2010. He was referred to EL Bakry Hospital-Cairo in moderate condition. Tamiflu (oseltamivir) treatment was started on 14 Feb 2010. Infection with HPAI [highly pathogenic avian influenza -- that is, avian influenza (H5N1) virus infection] was confirmed on 17 Feb 2010. The Ministry of Health (MOH) reported this was case number 100 of highly pathogenic avian influenza in Egypt.

AVIAN INFLUENZA, Human (VIET NAM): 24 Feb 2010, A 3 year old girl in the central province of Khanh Hoa has tested positive for [avian influenza] H5N1 [virus infection]. The girl, who lives in Ninh Hoa District's Ninh Than Commune, fell sick with fever, sore throat, cough, and a runny nose on 27 Jan 2010. She was admitted to Ninh Hoa Hospital the next day and was confirmed to be infected with the virus on 12 Feb 2010, according to the Ministry. The girl was recovering, the Ministry reported. An inspection conducted in Ninh Than showed no sign of the avian flu in the commune, and the poultry raised by the girl's family showed no signs of sickness. However, the Ministry's inspectors found that about a month earlier, ostriches had died of [an undiagnosed disease] at a farm a kilometre [0.6 mi] from the patient's home. According to the Ministry, 112 people have been infected by avian influenza H5N1 virus since 2003, and 57 have died. Also on Monday [22 Feb 2010], the Ministry reported that the total number of emergency cases related to daily life accidents admitted to hospitals nationwide had doubled from the previous year during the 6-day Tet holiday starting 13 Feb 2010. The death toll in traffic accidents during the holiday increased 29 per cent year-on-year, while fatalities from fights were 3.4 times higher than the year before [2009], the Ministry said. Food poisoning cases also increased by 70 per cent over more than the 1100 recorded during last year's holiday, the Ministry said.

H1N1 INFLUENZA (Swine Flu):

INFLUENZA PANDEMIC (H1N1), WORLD HEALTH ORGANIZATION UPDATE: 21 Feb 2010, Worldwide more than 212 countries and overseas territories or communities have reported laboratory confirmed cases of pandemic influenza H1N1 2009, including at least 15 921 deaths.

Situation update: Temperate zone of the northern hemisphere: active but declining pandemic influenza transmission persists in limited areas of eastern and southern Europe, South Asia, and in East Asia. Several countries in West Africa reported increases in the number of cases, but there is as yet insufficient evidence to conclude that widespread community transmission is occurring. An increasing trend in respiratory diseases activity was reported in Thailand and Jamaica, however the cause of the respiratory disease is uncertain at this point.

Southeast Asia: several countries reported an increasing trend of respiratory diseases activity, but overall intensity remained low. After several months of sporadic influenza activity, Thailand reported increasing respiratory diseases activity marked by increased ILI [influenza-like illnesses] in 24 provinces; however, the overall intensity of activity nationally remains low. In Myanmar and Indonesia, localized geographic spread of influenza activity, an increasing trend of respiratory diseases, and low overall intensity was reported. In South Asia, influenza activity persists in the northern and western states of India, however, overall influenza activity continued to decline or remained low in India, Nepal, Bangladesh, and Sri Lanka. In East Asia, transmission of pandemic influenza virus persists but has been steadily declining in most countries of the region (China, Japan, and the Republic of Korea),

with the exception of DPR Korea, where an increasing trend of respiratory diseases activity was reported. In West Asia, pandemic influenza virus continues to circulate in many countries, however the overall intensity of current activity remains low in the region.

North Africa: pandemic influenza transmission persists, but substantial declines in activity continue to be reported over the past month. In Sub-Saharan Africa, limited data suggest that pandemic influenza virus transmission may be sporadic in most areas of the continent. Several countries in West Africa continue to report increases in the numbers of confirmed cases of pandemic influenza, however, currently, no countries in the region are reporting an increasing trend in respiratory diseases activity.

Europe: pandemic influenza virus continues to circulate across central and southeastern Europe, but the overall intensity of activity remained low in most places; only Greece, Bulgaria, Turkey, Slovakia, the Republic of Moldova, and the Russian Federation reported a moderate intensity of respiratory diseases activity. Several weeks of increases in ARI/ILI [acute respiratory infections/influenza-like illnesses] were reported in Slovakia and in the Russian Federation, but increased activity in these countries may be associated with other circulating respiratory viruses. Among 12 countries testing at least 20 sentinel respiratory specimens, only Hungary reported that greater than 20 percent specimens had tested positive for influenza.

Americas: both in the tropical and northern temperate zones, pandemic influenza virus continues to circulate at low levels, but overall pandemic influenza activity continued to decline or remained low in most places. In Central America and the Caribbean, pandemic influenza virus transmission persists, but overall activity remains low or unchanged in most places. Jamaica reported an increasing trend of respiratory diseases activity, but the overall intensity remains low.

Pandemic influenza (H1N1) 2009 virus continues to be the predominant influenza virus circulating worldwide. In addition to the increasing proportion of seasonal influenza type B viruses recently detected in China, low levels of seasonal H3N2 and type B viruses are circulating in parts of Africa, and Asia. The Global Influenza Surveillance Network (GISN) continues monitoring the global circulation of influenza viruses, including pandemic, seasonal and other influenza viruses infecting or with the potential to infect humans, including seasonal influenza.

Resources:

<http://www.cdc.gov/h1n1flu/>

<http://www.dhmh.maryland.gov/swineflu/>

NATIONAL DISEASE REPORTS

No new disease outbreaks related to CDC Critical Biological Agents were reported for MWWR week 08.

INTERNATIONAL DISEASE REPORTS

Q FEVER (NETHERLANDS): 26 Feb 2010, Since the beginning of January 2010, 2 people have died of Q fever. This was announced by the National Institute for Public Health and the Environment (RIVM). The 2 victims suffered of chronic Q fever which they acquired a long time back; they had also additional illnesses. The total number of officially reported human fatalities, due to Q fever, is 8. According to experts, the actual number of victims is rather higher. (Q Fever is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (INDONESIA): 16 Feb 2010, A district in the south east of the impoverished Indian Ocean island of Madagascar is battling a outbreak of the mosquitoborne chikungunya or "stooped walk" virus, a local newspaper reported on Thursday [25 Feb 2010]. Chikungunya virus, which is transmitted by a bite from an infected mosquito, causes high fever, headaches, and severe joint pain that can last several weeks. Around 44 000 families in and around Mananjary, a small port town on the Mananjary River [Fianarantsoa Province], have been affected by the outbreak, the Malaza daily reported. The virus gets its name from the Swahili for "stooped walk", after the appearance of a person affected by the disease, according to the World Health Organization (WHO). The latest outbreak in Madagascar has spread rapidly since the 1st case was diagnosed in the capital Antananarivo on 11 Feb [2010]. Over 60 per cent of the population in 8 Mananjary neighbourhoods were receiving medical attention after displaying symptoms, the report said. Checkpoints had been set up on access roads leading to the town and all incoming vehicles were being sprayed with insecticide. There are no specific treatments nor a vaccine for chikungunya [virus], which occurs during the rainy season in parts of Africa, Southeast Asia, southern India, and Pakistan, according to the WHO. The virus is rarely deadly, but a number of fatalities were reported during a severe outbreak in La Reunion Island near Madagascar in 2005-2006. (Emerging Infectious Disease is listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (MADAGASCAR): 24 Feb 2010, Health authorities in South Lampung [regency of Lampung province] have declared a special alert for the chikungunya virus in Bakauheni district, after 121 residents contracted the disease. The alert was issued following an increase in the number of infected residents, South Lampung Disease Prevention and Surveillance chief Kristi Endrawati told Antara news agency on Friday [12 Feb 2010?]. "During the rainy season, the spread of chikungunya disease has intensified," she said. The disease 1st infected residents in Hatta village before spreading to other areas of Bakauheni.

Once infected with the virus, victims typically develop a high fever, reddish spots, joint pains, flu symptoms and headaches and vomiting. Numbers of the *Aedes aegypti* mosquito, which carries the chikungunya virus and spreads it in humans through its bite, were rapidly increasing in cacao plantation areas in the regency, she said. Kristi said that the agency has held campaigns asking local residents to bury cacao pods, which can hold water and serve as a breeding grounds for mosquitoes. "We have also conducted fogging in Bakauheni's densely-populated areas and provided medical services to locals," she said. In South Kalimantan regency of Banjar [Borneo], at least 4500 people were infected with the disease over the past 40 days. Banjar Disease Prevention Agency chief Endah Labati said recently that the number was expected to increase because the mosquitoes were breeding quickly in the wet season. (Emerging Infectious Disease is listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, BOVINE (ARGENTINA): 23 Feb 2010, In the partido [division] of Coronel Dorrego, Province of Buenos Aires, and close to Laguna [a lake] de Sauce Grande, a cattle establishment suffered 4 sudden deaths of adult cattle with extravasation of blood from the natural openings of the body, including their noses. The herd of mixed breed cattle was in good health; the weather has been humid with high temperatures [it is summer in Argentina. - Mod.MHJ]; and the cattle were on natural grazing. [Unfortunately] the herd had not been vaccinated against anthrax. There is no record of anthrax on this farm in the past 30 years. The carcasses were handled in the standard manner by covering them in lime and then a weighted down heavy duty plastic tarpaulin. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, BOVINE (ZIMBABWE): 23 Feb 2010, An anthrax outbreak has killed over 50 head of cattle in Mwenezi over the past week, causing fear and apprehension among villagers who fear their beef herd might be decimated by the plague. The hardest hit areas are Maranda, Neshuro and Rutenga amid calls by villagers for the government to deploy vaccines. The outbreak in Mwenezi -- which is one of Masvingo's key beef producers -- has left ranchers worried. Zimbabwe Farmers Union regional manager Mr Jeremiah Chimwanda confirmed the outbreak, saying efforts were underway to find ways of containing the outbreak. "We are currently mobilising vaccines as ZFU, and we will soon be handing over the vaccines to villagers in the affected areas since we want to preserve our beef herd," said Mr Chimwanda. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmh.maryland.gov/>

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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